

**Abstract of the Disclosure**

A hydraulic transmission system for use with at least one water current driven turbine rotor (6), low speed high pressure pump (24) is arranged to receive operational drive from the turbine rotor, and to deliver its output to a high speed hydraulic motor or turbine (35) in such manner as to produce an increase of the shaft or motor speed accompanied by a corresponding reduction of torque required to drive electrical generators (38) or other high speed machinery.